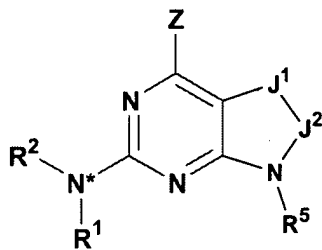


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of claims:

1. (Currently Amended) A compound of Formula (I)



(I)

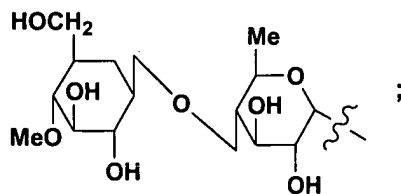
their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

R¹ is hydrogen or alkyl;

R² is

- (a) heteroaryl or heterocyclo, either of which may be optionally independently substituted with one to three groups selected from T¹, T² and/or T³;
- (b) aryl substituted with one to three groups selected from T¹, T², and/or T³ provided that at least one of T¹, T² and/or T³ is other than H; or
- (c) aryl fused to a heteroaryl or heterocyclo ring forming a fused ring system bound to N* through the aryl wherein the fused ring system may be optionally independently substituted with one to three groups selected from T¹, T² and/or T³;

provided that R² is not



Z is -NR³R⁴, -NR³SO₂R⁶, OR⁴, SR⁴, haloalkyl or halogen;

J¹ is O[,] or S-, S(O)-, S(O)₂- or optionally substituted C₁₋₃-alkylene;

J² is ~~carbonyl or optionally substituted C₁₋₃ C₂alkylene, provided that J¹ and J² taken together do not form an alkylene chain of greater than 4 carbon atoms;~~

R³ and R⁴ are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁴, T⁵ and/or T⁶;

or R³ and R⁴ may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which is optionally independently substituted where valance allows with one to three groups independently selected from T⁴, T⁵ and/or T⁶;

R⁵ is

- (i) H, cyano, alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) -C(O)_tR⁷, -C(O)-C(O)-C(O)OR⁷ or -SO₂R⁸;

R⁶ is alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo, or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁴, T⁵ and/or T⁶;

R⁷ is

- (i) H, alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) -NR⁹R¹⁰ or (NR⁹R¹⁰)alkyl;

R⁸ is

- (i) alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) -NR⁹R¹⁰ or (NR⁹R¹⁰)alkyl;

R⁹ and R¹⁰ are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹;

T¹-T⁹ are each independently

- (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, -OT¹⁰, -SH, -ST¹⁰, -C(O)_tH, -C(O)_tT¹⁰, -O-C(O)T¹⁰, T¹⁷C(O)_tN(T¹¹)T¹⁰-SO₃H, -S(O)_tT¹⁰, S(O)_tN(T¹¹)T¹⁰, -T¹²-NT¹⁴T¹⁵, -T¹²-N(T¹¹)-T¹³-NT¹⁴T¹⁵, -T¹²-N(T¹⁶)-T¹⁵-T¹⁰ and -T¹²-N(T¹⁶)-T¹³-H; or
- (ii) halo, cyano, nitro, OH, oxo, -SH, amino, -OT¹⁰, -ST¹⁰, -C(O)_tH, -C(O)_tT¹⁰, -O-C(O)T¹⁰, T¹⁷C(O)_tN(T¹¹)T¹⁰, -SO₃H, -S(O)_tT¹⁰, S(O)_tN(T¹¹)T¹⁰, -T¹²-NT¹⁴T¹⁵, -T¹²-N(T¹¹)-T¹³-NT¹⁴T¹⁵, -T¹²-N(T¹⁶)-T¹⁵-T¹⁰ or -T¹²-N(T¹⁶)-T¹³-H;

t is 1 or 2;

T¹⁰ is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl;

T¹² and T¹³ are each independently a single bond, -T¹⁷-S(O)_t-T¹⁸-, -T¹⁷-C(O)-T¹⁸-, -T¹⁷-C(S)-T¹⁸-, -T¹⁷-O-T¹⁸-, -T¹⁷-S-T¹⁸-, -T¹⁷-O-C(O)-T¹⁸-, -T¹⁷-C(O)_tT¹⁸-, -T¹⁷-C(=NT¹⁹)-T¹⁸- or -T¹⁷-C(O)-C(O)-T¹⁸-;

T¹¹, T¹⁴, T¹⁵, T¹⁶ and T¹⁹ are each independently

- (i) hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from

- alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²² and —S(O)_tT²²; or
- (ii) halo, cyano, nitro, OH, oxo, —SH, amino, —OT²², —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²², —SO₃H, or —S(O)_tT²²; or
- (iii) T¹⁴ and T¹⁵ may together be alkylene or alkenylene, completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or
- (iv) T¹⁴ or T¹⁵, together with T¹¹, may be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or
- (v) T¹⁴ and T¹⁵ or T¹¹ and T¹⁶ together with the nitrogen atom to which they are attached may combine to form a group —N=CT²⁰T²¹;

T¹⁷ and T¹⁸ are each independently a single bond, alkylene, alkenylene or alkynylene;

T²⁰ and T²¹ are each

- i. independently hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²² and —S(O)_tT²²; or
- ii. halo, cyano, nitro, OH, oxo, —SH, amino, —OT²², —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²², —SO₃H, —S(O)_tT²² or S(O)_tN(T¹¹)T²²; and

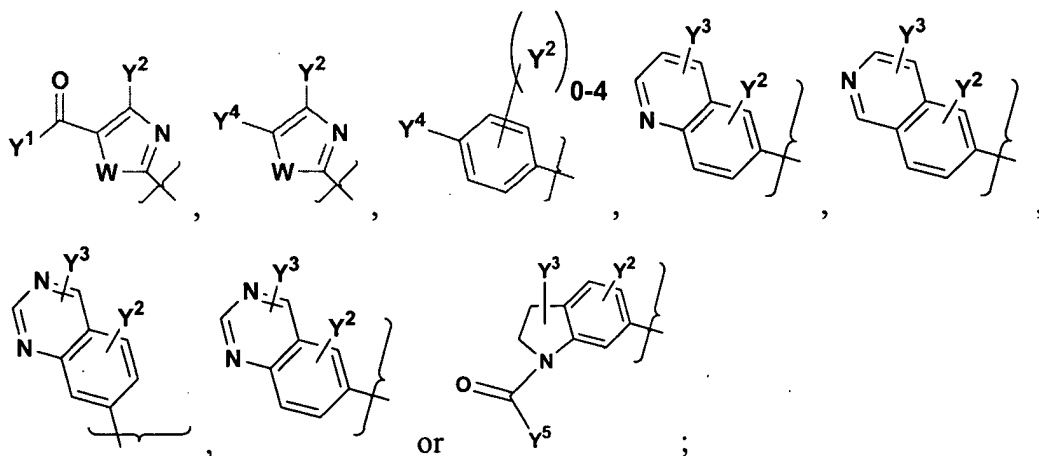
T²² is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl.

2. (Original) A compound of claim 1, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein

R^2 is

- (a) heteroaryl optionally independently substituted with one to three groups selected from T^1 , T^2 and/or T^3 ;
- (b) aryl substituted with one to three groups selected from T^1 , T^2 , and/or T^3 provided that at least one of T^1 , T^2 and/or T^3 is other than H; or
- (c) aryl fused to a heteroaryl or heterocyclo ring forming a fused ring system bound to N^* through the aryl wherein the fused ring system may be optionally independently substituted with one to three groups selected from T^1 , T^2 and/or T^3 .

3. (Original) A compound of claim 2, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein R^2 is chosen from:



W is O or S;

Y^1 is $-NHT^{15}$ or OT^{10} ;

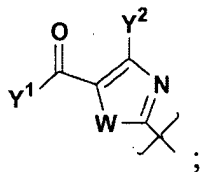
Y^2 and Y^3 are independently hydrogen, halo, OT^{10} , alkyl or haloalkyl;

Y^4 is optionally substituted heteroaryl, cyano, $C(O)_i T^{10}$ or $S(O)_i NT^{14} T^{15}$; and

Y^5 is alkyl, haloalkyl, NHT^{15} or OT^{10} .

4. (Original) A compound of claim 3, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

R² is



W is O or S;

Y¹ is -NHT¹⁵ or OT¹⁰; or

Y² is alkyl or haloalkyl.

5. (Currently Amended) A compound of claim 1, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

R¹ is H;

J¹ is O[,] or ~~S or optionally substituted C₄ alkylene;~~

J² is ~~C(O) or~~ optionally substituted C₁₋₃ C₂ alkylene.;

Z is -NR³R⁴ or halo;

R³ is H or alkyl;

R⁴ is alkyl, cycloalkyl, heterocyclo, (heteroaryl)alkyl, (heterocyclo)alkyl or (aryl)alkyl, any of which

is optionally independently substituted where valence allows with one to three groups selected from alkyl, hydroxyalkyl, halo, cyano, OH, oxo, cycloalkyl, cycloalkenyl, heterocyclo, heteroaryl, -C(O)_tT¹⁰, -C(O)_tH, -NHC(O)T¹⁰, C(O)N(T¹⁴)(T¹⁵), OT¹⁰, ST¹⁰, S(O)₃H, S(O)_tT¹⁰, S(O)_tN(T¹⁰)(T¹¹), T¹²N(T¹⁴)(T¹⁵) and T¹²N(T¹⁶)-T¹⁵-T¹⁰;

or R³ and R⁴ may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which may be optionally independently substituted where valence allows with one to three groups selected from alkyl, hydroxyalkyl, halo, cyano, OH, oxo, cycloalkyl, cycloalkenyl, heterocyclo, heteroaryl, -C(O)_tT¹⁰, -C(O)_tH, -NHC(O)T¹⁰, C(O)N(T¹⁴)(T¹⁵), OT¹⁰, ST¹⁰, S(O)₃H, S(O)_tT¹⁰, S(O)_tN(T¹⁴)(T¹⁵), T¹²N(T¹⁴)(T¹⁵) and T¹²N(T¹⁶)-T¹⁵-T¹⁰,

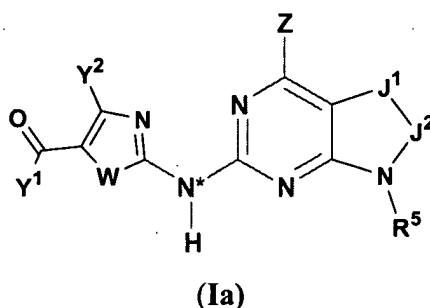
wherein each heterocyclo or heteroaryl is further optionally substituted by one to three groups independently selected from cyano, oxo, hydroxy, alkyl, halo, haloalkyl and -OT¹⁰;

R⁵ is alkyl, cycloalkyl, (cycloalkyl)alkyl, (aryl)alkyl, (heterocyclo)alkyl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits with one to three

groups selected from cyano, oxo, hydroxy, alkyl, halo, haloalkyl, $-\text{OT}^{10}$, $-\text{C}(\text{O})_t\text{N}(\text{T}^{14})(\text{T}^{15})$, $-\text{C}(\text{O})_t\text{NH S}(\text{O})_t(\text{T}^{11})$, $-\text{S}(\text{O})_t\text{T}^{10}$, $-\text{S}(\text{O})_t\text{N}(\text{T}^{14})(\text{T}^{15})$, $\text{T}^{12}\text{N}(\text{T}^{14})(\text{T}^{15})$, $-\text{C}(\text{O})_t\text{T}^{11}$, heterocyclo and heteroaryl,

wherein each heterocyclo or heteroaryl is further optionally substituted by one to three groups selected from cyano, oxo, hydroxy, alkyl, halo, haloalkyl, and $-\text{OT}^{10}$.

6. (Currently Amended) A compound of Formula (Ia)



their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

W is O or S;

Y¹ is $-\text{NHT}^{15}$ or OT^{10} ;

Y² is alkyl or haloalkyl;

Z is $-\text{NR}^3\text{R}^4$ or halogen;

J¹ is O or optionally substituted C_{1-3} alkylene;

J² is ~~carbonyl or optionally substituted C_{1-3} C_2 alkylene, provided that J¹ and J² taken together do not form an alkylene chain of greater than 4 carbon atoms;~~

R³ and R⁴ are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁴, T⁵ and/or T⁶;

or R³ and R⁴ may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which is optionally independently substituted where valance allows with one to three groups independently selected from T⁴, T⁵ and/or T⁶;

R⁵ is

- (i) H, cyano, alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
- (ii) $-C(O)_tR^7$, $-C(O)-C(O)-C(O)OR^7$ or $-SO_2R^8$;

R^6 is alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^4 , T^5 and/or T^6 ;

R^7 is

- (i) H, alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
- (ii) $-NR^9R^{10}$ or $(NR^9R^{10})alkyl$;

R^8 is

- (i) alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
- (ii) $-NR^9R^{10}$ or $(NR^9R^{10})alkyl$;

R^9 and R^{10} are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ;

T^1 - T^9 are each independently

- (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl,

(aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, $-\text{OT}^{10}$, $-\text{SH}$, $-\text{ST}^{10}$, $-\text{C}(\text{O})_t\text{H}$, $-\text{C}(\text{O})_t\text{T}^{10}$, $-\text{O}-\text{C}(\text{O})\text{T}^{10}$, $-\text{SO}_3\text{H}$, $-\text{S}(\text{O})_t\text{T}^{10}$, $\text{T}^{17}\text{C}(\text{O})_t\text{N}(\text{T}^{11})\text{T}^{10}$, $\text{S}(\text{O})_t\text{N}(\text{T}^{11})\text{T}^{10}$, $-\text{T}^{12}-\text{NT}^{14}\text{T}^{15}$, $-\text{T}^{12}-\text{N}(\text{T}^{11})-\text{T}^{13}-\text{NT}^{14}\text{T}^{15}$, $-\text{T}^{12}-\text{N}(\text{T}^{16})-\text{T}^{15}-\text{T}^{10}$ and $-\text{T}^{12}-\text{N}(\text{T}^{16})-\text{T}^{13}-\text{H}$; or

- (ii) halo, cyano, nitro, OH, oxo, $-\text{SH}$, amino, $-\text{OT}^{10}$, $-\text{ST}^{10}$, $-\text{C}(\text{O})_t\text{H}$, $-\text{C}(\text{O})_t\text{T}^{10}$, $-\text{O}-\text{C}(\text{O})\text{T}^{10}$, $\text{T}^{17}\text{C}(\text{O})_t\text{N}(\text{T}^{11})\text{T}^{10}$, $-\text{SO}_3\text{H}$, $-\text{S}(\text{O})_t\text{T}^{10}$, $\text{S}(\text{O})_t\text{N}(\text{T}^{11})\text{T}^{10}$, $-\text{T}^{12}-\text{NT}^{14}\text{T}^{15}$, $-\text{T}^{12}-\text{N}(\text{T}^{11})-\text{T}^{13}-\text{NT}^{14}\text{T}^{15}$, $-\text{T}^{12}-\text{N}(\text{T}^{16})-\text{T}^{15}-\text{T}^{10}$ or $-\text{T}^{12}-\text{N}(\text{T}^{16})-\text{T}^{13}-\text{H}$;

t is 1 or 2;

T^{10} is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl;

T^{12} and T^{13} are each independently a single bond, $-\text{T}^{17}-\text{S}(\text{O})_t-\text{T}^{18}-$, $-\text{T}^{17}-\text{C}(\text{O})-\text{T}^{18}-$, $-\text{T}^{17}-\text{C}(\text{S})-\text{T}^{18}-$, $-\text{T}^{17}-\text{O}-\text{T}^{18}-$, $-\text{T}^{17}-\text{S}-\text{T}^{18}-$, $-\text{T}^{17}-\text{O}-\text{C}(\text{O})-\text{T}^{18}-$, $-\text{T}^{17}-\text{C}(\text{O})_t\text{T}^{18}-$, $-\text{T}^{17}-\text{C}(=\text{NT}^{19})-\text{T}^{18}-$ or $-\text{T}^{17}-\text{C}(\text{O})-\text{C}(\text{O})-\text{T}^{18}-$;

T^{11} , T^{14} , T^{15} , T^{16} and T^{19} are each independently

- (i) hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, $-\text{SH}$, $-\text{ST}^{22}$, $-\text{C}(\text{O})_t\text{H}$, $-\text{C}(\text{O})_t\text{T}^{22}$, $-\text{O}-\text{C}(\text{O})\text{T}^{22}$ and $-\text{S}(\text{O})_t\text{T}^{22}$ or
- (ii) halo, cyano, nitro, OH, oxo, $-\text{SH}$, amino, $-\text{OT}^{22}$, $-\text{ST}^{22}$, $-\text{C}(\text{O})_t\text{H}$, $-\text{C}(\text{O})_t\text{T}^{22}$, $-\text{O}-\text{C}(\text{O})\text{T}^{22}$, $-\text{SO}_3\text{H}$, $-\text{S}(\text{O})_t\text{T}^{22}$ or $\text{S}(\text{O})_t\text{N}(\text{T}^{11})\text{T}^{22}$; or
- (iii) T^{14} and T^{15} may together be alkylene or alkenylene, completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T^{20} ; or
- (iv) T^{14} or T^{15} , together with T^{11} , may be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which

they are attached, which ring is substituted with one or more groups listed in the description of T^{20} ; or

- (v) T^{14} and T^{15} or T^{11} and T^{16} together with the nitrogen atom to which they are attached may combine to form a group $-N=CT^{20}T^{21}$;

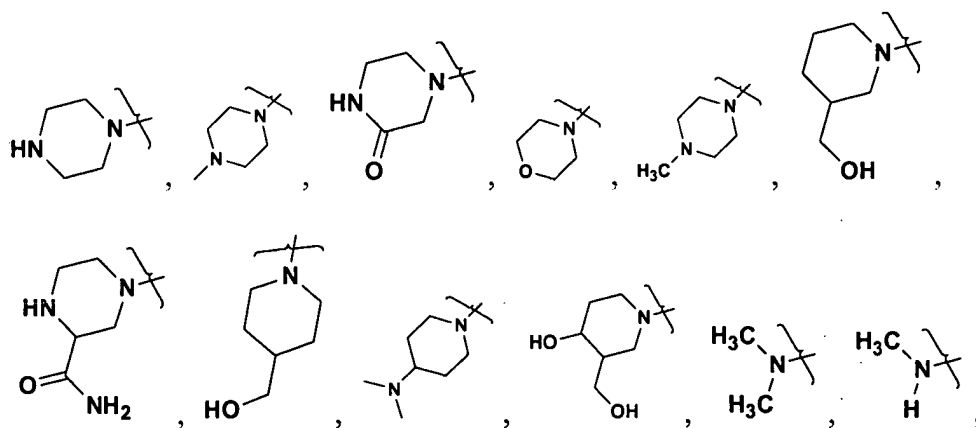
T^{17} and T^{18} are each independently a single bond, alkylene, alkenylene or alkynylene;

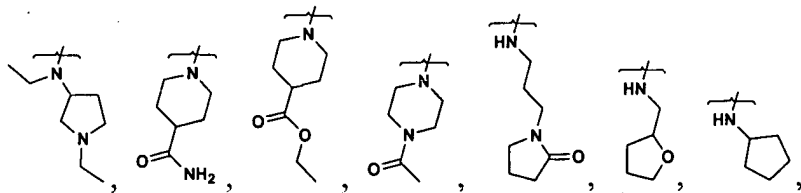
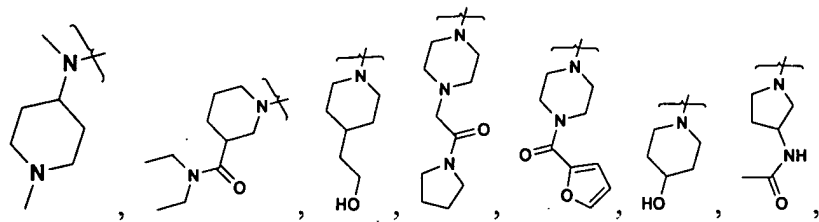
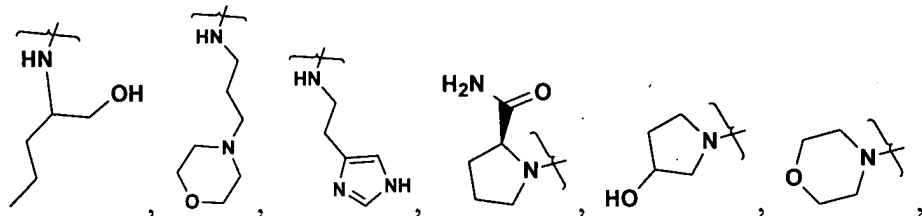
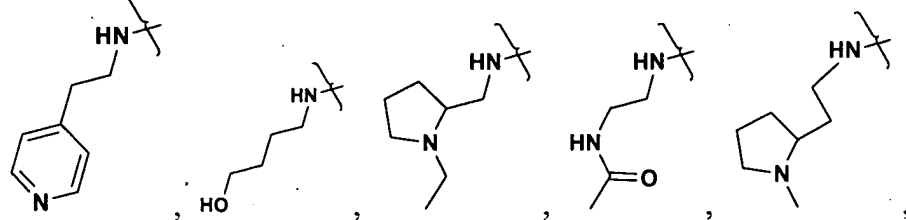
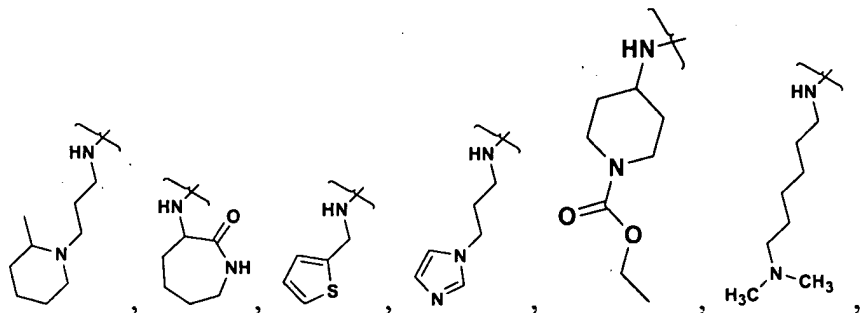
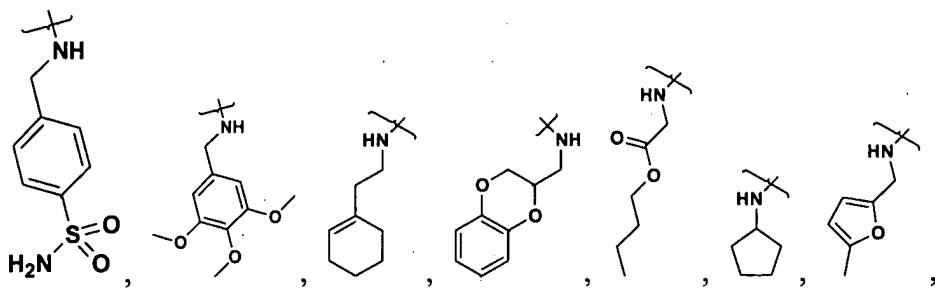
T^{20} and T^{21} are each

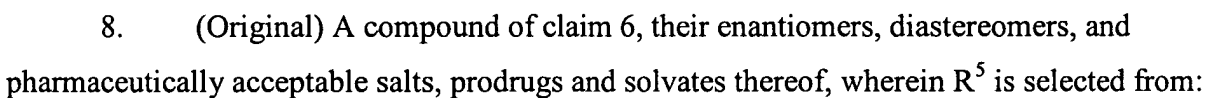
- (i) independently hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, $-SH$, $-ST^{22}$, $-C(O)_iH$, $-C(O)_iT^{22}$, $-O-C(O)T^{22}$ and $-S(O)_iT^{22}$; or
- (ii) halo, cyano, nitro, OH, oxo, $-SH$, amino, $-OT^{22}$, $-ST^{22}$, $-C(O)_iH$, $-C(O)_iT^{22}$, $-O-C(O)T^{22}$, $-SO_3H$, $-S(O)_iT^{22}$ or $S(O)_iN(T^{11})T^{22}$; and

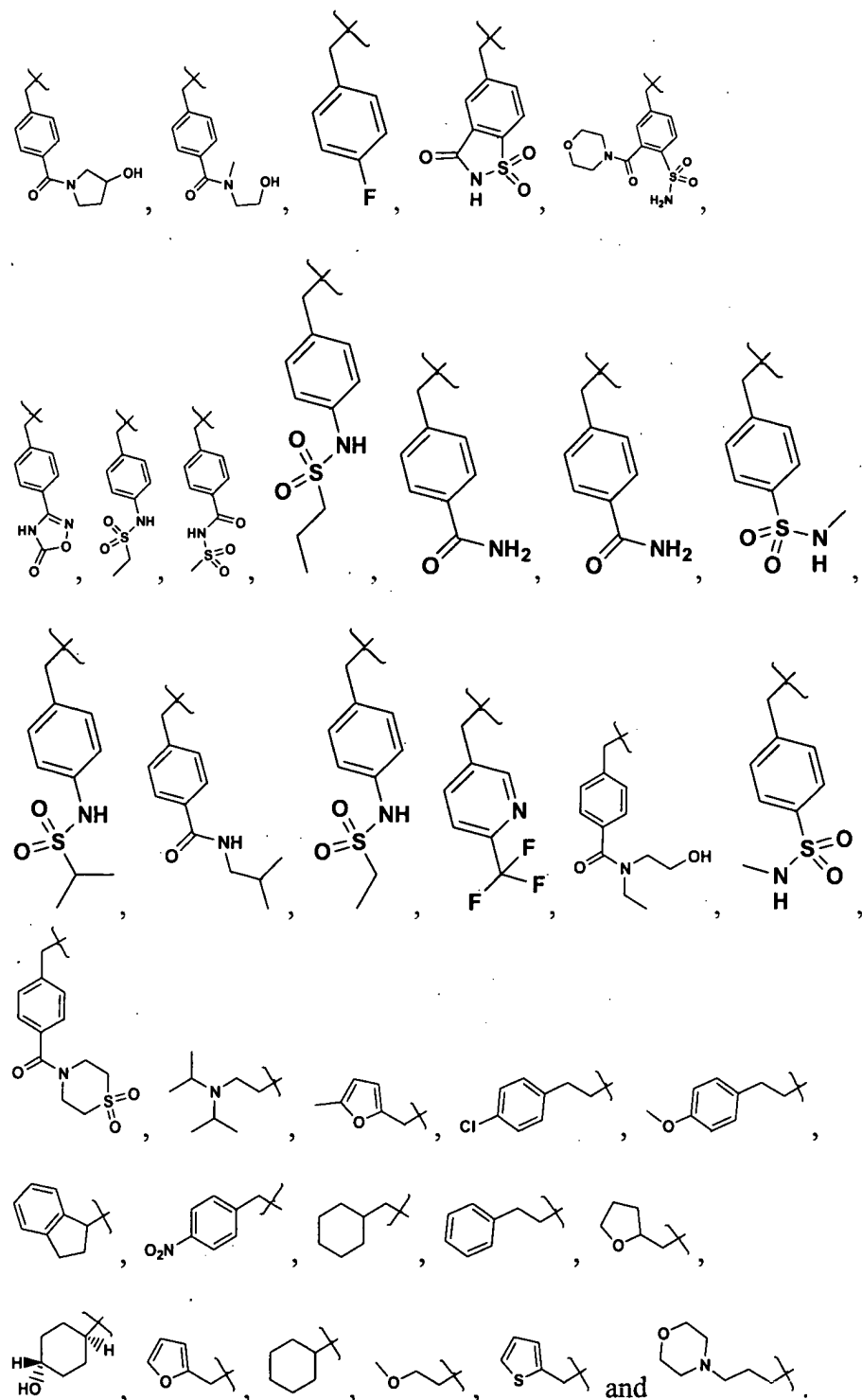
T^{22} is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl.

7. (Original) A compound of claim 6, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein Z is selected from:

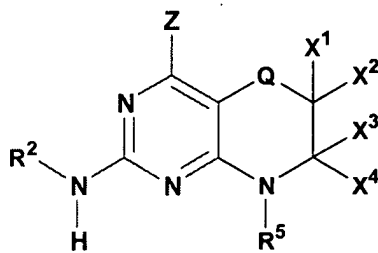








9. (Currently Amended) A compound of claim 1 having Formula (II)



(II)

their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof,

wherein:

Q is O[,] or S or ~~optionally substituted C₁-alkylene~~; and

X¹, X², X³ and X⁴ are

- (i) independently chosen from hydrogen, T¹⁰, OT¹⁰ and NT¹⁴T¹⁵; or
- (ii) X¹ and X² or X³ and X⁴ may be taken together to be a carbonyl group.

10. (Currently Amended) A compound of claim 9, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein Q is ~~-CH₂-~~ or O.

11. - 14. (Canceled)

15. (Original) A pharmaceutical composition comprising at least one compound of claim 1.

16. (Currently Amended) The pharmaceutical composition of claim ~~16~~ 21 comprising at least one compound of claim 14.

17. (Original) The pharmaceutical composition of claim 15 further comprising at least one additional therapeutic agent suitable for the treatment of leukocyte activation-associated diseases.

18. (Original) The pharmaceutical composition of claim 17 wherein the at least one additional therapeutic agent is selected from PDE4 inhibitors, consisting of NSAIDs, COX-2 inhibitors, TNF- α inhibitors, beta-2 agonists, anti-cholinergic agents, and steroids.

19. (Original) A method of treating leukocyte activation-associated disorders which comprises administering an effective amount of at least one composition of claim 1 to a patient in need thereof.

20. (Original) The method of claim 19 wherein said disorder is transplant rejection, graft versus host disease, rheumatoid arthritis, multiple sclerosis, juvenile diabetes, asthma, inflammatory bowel disease, ischemic or reperfusion injury, cell proliferation, or psoriasis.

21. (New) A compound of claim 1 selected from
- i. 2-[8-(4-Methanesulfonyl-benzyl)-4-(3-oxo-piperazin-1-yl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;
4-Methyl-2-[4-morpholin-4-yl-8-(3,4,5-trimethoxy-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
4-Methyl-2-[4-morpholin-4-yl-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
2-[4-(4-Hydroxy-piperidin-1-yl)-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;
4-Methyl-2-[4-(3-oxo-piperazin-1-yl)-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
2-[8-(4-Methanesulfonyl-benzyl)-4-morpholin-4-yl-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester; and
2-[4-(4-Hydroxy-piperidin-1-yl)-8-(4-methanesulfonyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester; or
 - ii. the enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates of each of (i).